2002 New Jersey Adult Tobacco Survey

A Statewide Report
July 2003

James E. McGreevey
Governor

CTCP
NEW JERSEY
Comprehensive Tobacco Control Program

NEW JERSEY DEPARTMENT of HEALTH and SENIOR SERVICES

Clifton R. Lacy, M.D.
Commissioner

Acknowledgments

The New Jersey Comprehensive Tobacco Control Program (CTCP) is operated by the New Jersey Department of Health and Senior Services (DHSS) under the direction of Commissioner Clifton R. Lacy, M.D. The CTCP is administratively located within the Division of Addiction Services, Prevention Services Unit. This report was prepared for DHSS by the University of Medicine and Dentistry of New Jersey-School of Public Health through funding from New Jersey's tobacco excise tax.

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Suggested Citation

Delnevo CD, Hrywna M, Staniewska D, Malka ES, Brown ME. The 2002 New Jersey Adult Tobacco Survey: A Statewide Report. UMDNJ-School of Public Health. New Brunswick, NJ. July 2003.

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Executive Summary

The 2002 New Jersey Adult Tobacco Survey found that:

- Current cigarette smoking prevalence among adults dropped to 18%. Males (20.8%) were more likely to be current smokers than females (15.6%). Young adults (18 to 24) reported the highest prevalence (22.7%). Current cigarette smoking prevalence was lower in 2002 than in the previous two years.

- Among current smokers, 77% reported smoking everyday while 23% reported smoking somedays. Everyday versus someday smoking was associated with age; young adult smokers were least likely to report smoking everyday (64.4%), while senior smokers were most likely to report everyday smoking (84.5%).

- Current everyday smokers reported smoking an average of 17.1 cigarettes per day. Someday smokers reported smoking an average of 4.6 cigarettes on the days they smoked.

- Cigars were the most common form of tobacco used after cigarettes (5.7%). The current prevalence of other tobacco products was generally low.

- After the July 2002 cigarette tax increase, approximately 40% of smokers reported that they changed where they purchased their cigarettes; 28.1% of smokers reported buying fewer cigarettes; and 56.7% thought about quitting after the tax increase.

- After the tax increase, 84% of smokers reported that they usually purchased their cigarettes in New Jersey; however, a sizable percentage of smokers reported purchasing cigarettes from non- or –lower-taxed sources.

- During the last six months of 2002, the loss of tax revenue from daily smokers who reported usually purchasing cigarettes outside of New Jersey was estimated at $35,382,042.

- Changes are apparent in home smoking policies, with more than two-thirds (69.1%) of adults reporting that smoking is not allowed in their homes, an increase of 12.4% from 2000.

- Adults in New Jersey reported decreased ETS exposure at home, from 23.7% in 2000 to 20.2% in 2002.

Introduction

The New Jersey Comprehensive Tobacco Control Program (CTCP) was launched in 2000. Prior to implementing many of its program components, the CTCP considered it essential to collect baseline data to serve as standard against which to measure program effectiveness. In summer 2000, the CTCP commissioned the University of Medicine & Dentistry of New Jersey-School of Public Health (UMDNJ-SPH) to conduct the baseline New Jersey Adult Tobacco Survey (NJATS). It is the primary surveillance system for adult tobacco use in New Jersey. In addition to collecting data on the prevalence of tobacco use among adults, the survey examines the prevalence of restrictive smoking policies and attitudes toward various tobacco control measures. At that time, New Jersey was one of only a handful of states to conduct a statewide adult tobacco survey. Since the baseline NJATS, the survey has been repeated in 2001 and 2002.

The NJATS provides information that allows the CTCP to monitor progress over time and evaluate whether goals and objectives are being met, particularly those aimed at reducing the use of tobacco among New Jersey adults. The CTCP's approach is intended to accomplish these five broad goals: decrease the acceptability of tobacco use, decrease the initiation of tobacco use by youth under 18 and young adults 18 to 24, increase the number of tobacco users who seek treatment, decrease exposure to environmental tobacco smoke (ETS); and reduce disparities related to tobacco use. Since its launch, the CTCP has implemented several program components. The NJATS can evaluate exposure to and participation in the CTCP's major program elements such as New Jersey's Quit services, mass media campaigns, promotion of tobacco-free schools, workplaces, and public spaces, etc.

Most recently, the NJATS was administered by telephone to 4004 adults between November 2002 and January 2003. This report describes current trends and patterns of tobacco use behavior using the results of the most recent NJATS. In addition, the report will compare data from previous NJATSs (2000, 2001).

Results

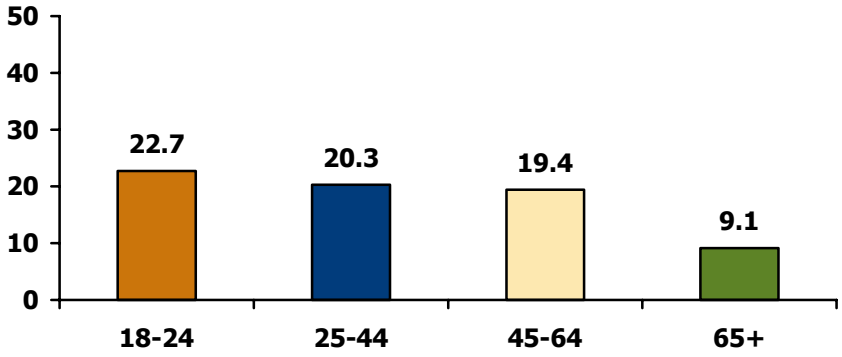
Cigarette Use Among Adults

Smoking behavior is complex and multifaceted. While cigarette smoking prevalence is the primary indicator, there are other important factors to consider such as frequency (e.g., rates of daily smoking) and quantity of smoking (e.g., cigarettes smoked per day). Measuring changes in smoking behavior, rather than prevalence alone, allows a more accurate assessment of subtle population shifts and captures changes that may not be readily apparent.

Current Cigarette Smoking Prevalence

In 2002, 18% (±1.6) of New Jersey adults were current cigarette smokers. The 2002 adult cigarette smoking prevalence was the lowest prevalence recorded in the past three years. While not statistically significant, current cigarette use among New Jersey adults declined from 19.8% (±1.5) in 2000 to 18.0% (±1.6) in 2002, a 9.1% decrease. However, there was a significant decline between 2001 and 2002; current smoking prevalence was 22.1% (±1.4) in 2001. As detailed in a previous evaluation report[1], current cigarette smoking prevalence increased in 2001, possibly resulting from the impact of September 11th. Overall, the trends are encouraging; current cigarette smoking prevalence has decreased.

Figure 1: Current smoking by age group, NJATS 2002

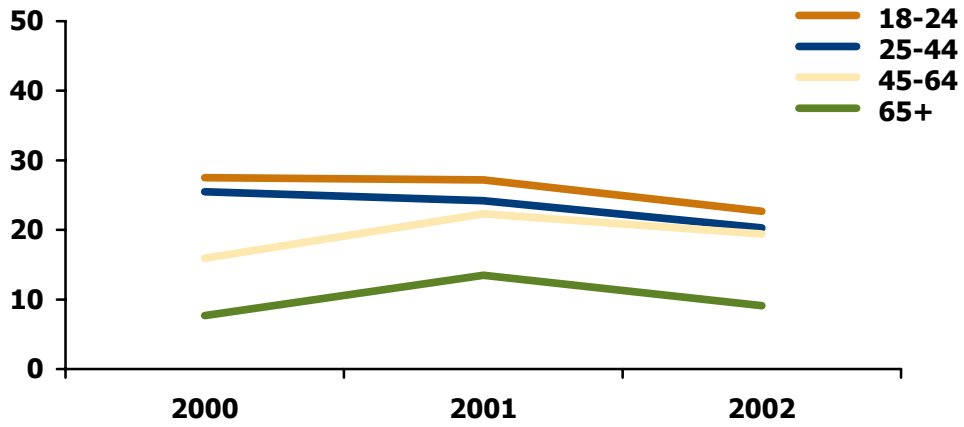


As in previous years, males were more likely to be current cigarette smokers (20.8 ±2.7%) than females (15.6 ±1.7%). There were no significant differences in current cigarette smoking among white (18.4 ±1.9%), black (16.5 ±3.7%), and Hispanic (20.0 ±5.3%) adults. Changes from 2000 to 2002 by gender and race/ethnicity followed the overall trend discussed above; details can be found in Appendix, Table 1.

1 Delnevo CD, et al. Independent evaluation of the New Jersey Comprehensive Tobacco Control Program: Annual Update for the New Jersey Department of Health and Senior Services. New Brunswick, NJ: University of Medicine & Dentistry of New Jersey-School of Public Health; May 2003.

As seen in Figure 1, all age groups demonstrated lower cigarette smoking prevalence in 2002 than in 2001. While young adults (aged 18 to 24) continued to have higher rates of current cigarette use (22.7 ±4.4%) than all other age groups, their rate of decline (16.5%) from 2001 exceeded that of adults aged 25 to 44 and 45 to 64. Senior smokers (age 65+) also reported great declines in smoking prevalence from 2001.

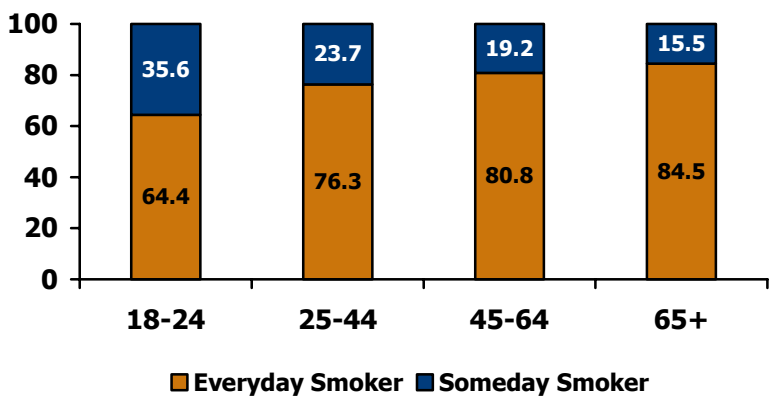
Figure 2: Current cigarette prevalence by age group, NJATS 2000-2002



Changing Patterns of Adult Cigarette Smoking

In 2002, more than three quarters (77.0 ±3.6%) of current smokers reported smoking everyday and 23% (±3.6) report smoking somedays. Among current smokers, daily smoking was similar among males (75.7 ±5.7%) and females (78.6 ±4.0%). Although the rate of everyday and someday smoking varied by gender and race/ethnicity, differences were not statistically significant. However, it is worthwhile to note that the everyday smoking was highest among white adults (79.4±4.3%). An interesting pattern emerged when examining everyday vs. someday smoking by age group (see Figure 3). Age was positively correlated with everyday smoking; young adults were least likely to report smoking everyday (64.4% ±9.8) while seniors were most likely (84.5% ±8.9) to report smoking everyday.

Figure 3: Everyday smoking vs. someday smoking by smokers' age group



While the overall prevalence of current cigarette smoking has not changed substantially, the pattern of smoking behavior has shifted to some extent. From 2000 to 2002, the proportion of everyday smoking among current smokers decreased from 78.3% (±3.0) to 77.0% (±3.6) (1.7% decline) while the proportion of someday smoking increased, from 21.7% (±3.0) to 23.0% (±3.6) (6.0% increase).

The behavior of adults that remain daily smokers is also changing. As shown in Figure 4, everyday smokers were examined by whether they were light smokers (<15/day) or heavy smokers (15+/day). Among everyday smokers, the percentage of heavy smokers has decreased over the past three years from 49.9% in 2000 to 45.6% in 2002. The proportion of light smokers (<15/day) has increased from 29.8% (±3.3) in 2000 to 31.7% (±4.0).`

Figure 4: Percentage of occasional smokers vs. daily smokers – NJATS, 2000-2002

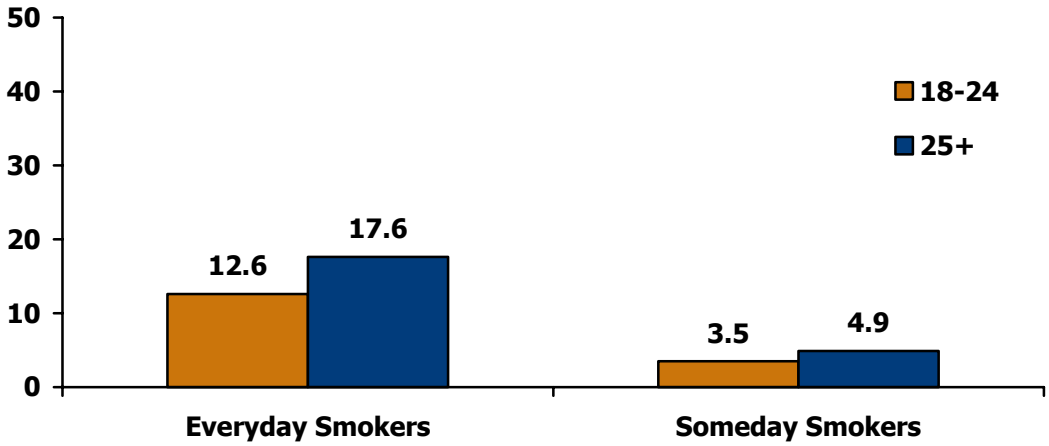
	2000			2002		
Occasional	20.3	±	2.8	22.7	±	3.6
Daily	79.7	±	2.8	77.3	±	3.6
< 15 cigs/day	29.8	±	3.3	31.7	±	4
>=15 cigs/day	49.9	±	3.6	45.6	±	4.3

Cigarette consumption among current smokers

Current everyday smokers reported smoking an average of 17.1 cigarettes per day. In contrast, current someday smokers reported smoking an average of 4.6 cigarettes on the days they smoked.

Among everyday smokers, males smoked significantly more cigarettes per day (mean 19.1 ±1.9%) than females (mean 14.8 ±1.1%) and whites smoked significantly more (mean 18.4 ±1.3%) than blacks (mean 11.6 ±1.7%). As shown in Figure 5, young adults smoked significantly less than those over 25, regardless of whether they were everyday or someday smokers.

Figure 5: Mean number of cigarettes smoked on days smoked among everyday and someday smokers by age group, 2002 NJATS



A decreasing trend in the mean number of cigarettes smoked was found for both everyday and someday smokers. The mean number of cigarettes smoked by everyday smokers in 2001 and 2000 was 18.3 (±0.9) and 17.4 (±0.8), respectively. The mean number of cigarettes smoked by someday smokers in 2001 and 2000 was 5.3 (±1.0) and 6.8 (±2.1) respectively.

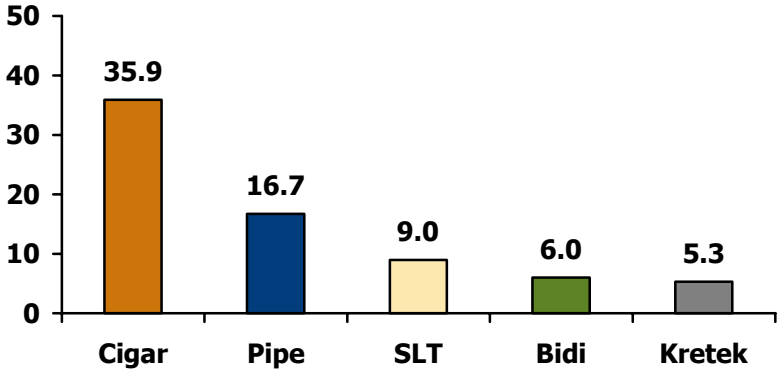
Use of Other Tobacco Products

Ever use of other tobacco products

Figure 6 presents ever use of other tobacco products. More than one third of adults in New Jersey reported having ever tried a cigar. Males (58.7%) (±4.1) were significantly more likely than females (16.2 ±2.2%) to report ever trying a cigar. There were no significant differences in ever cigar use by race/ethnicity or age.

Ever pipe tobacco use was reported by 16.7% (±1.9) of adults. Ever pipe use was significantly higher among males (30.8 ±3.7%) compared to females (4.6 ±2.2%). Roughly a quarter of adults aged 45 and older (24.2 ±3.2%) reported having ever tried a pipe, compared to 9.4% (±2.1) of adults aged 18 to 44.

Figure 6: Percentage of adults who ever used tobacco by tobacco product – NJATS, 2002



Overall, 9.0% (±1.5) of adults reported having ever tried smokeless tobacco (SLT). Males (17.0 ±3.1) were significantly more likely than females to have ever tried SLT (2.0% ±0.8). Ever SLT use did not differ by race/ethnicity or age.

Bidis are small, brown hand-rolled Indian tobacco products. The prevalence of ever bidi use was 6.0% (±1.2). Among males, 8.4% (±2.2) said they ever tried a bidi while 3.9% (±1.1) of females reported ever bidi use. Whites had the lowest rate of ever bidi use (4.4%) (±1.1) compared to non-whites (9.1%) (±2.6), although the difference was not statistically significant. Lastly, 19.3% (±4.4) of young adults (18 to 24) reported ever bidi use, notably higher than other age groups whose rates of ever bidi use ranged from 2.26% (±1.1) to 7.0% (±2.2). Adults who reported ever kretek use (or clove cigarettes) exhibited similar trends to adults who had ever tried bidis.

Current use of other tobacco products

Among adults, cigars (5.7 ±1.2%) were the most common form of currently used tobacco after cigarettes. The overall current prevalence of other tobacco products, such as pipes, SLT, bidis, and kreteks was generally very low (<1.0%). The low prevalence of other products makes it difficult to detect differences between subgroups, which must be much larger to be considered statistically significant. However, trends for current use of other tobacco products mirror those described for ever use.

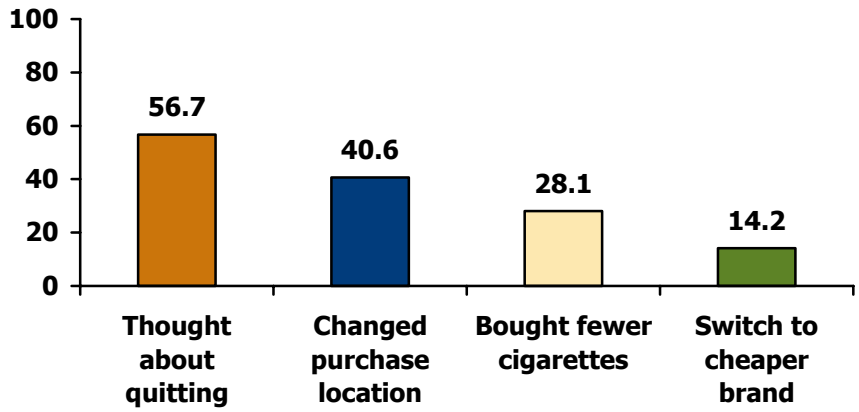
Impact of Tax Increase on New Jersey Smokers

In July 2002, the state of New Jersey raised the cigarette tax by $0.70 to $1.50 a pack, giving the state one of the highest tobacco taxes in the nation. The 2002 NJATS explored how adult cigarette smokers responded to this price increase. All adults who were smoking at the time of the increase, including recent quitters who had quit within the six months preceding the survey, answered questions regarding the impact of the tax increase.

Changes in behavior after the tax increase

Figure 7 depicts shifts in behavior or purchasing patterns as a result of the tobacco tax increase. More than half of adults who were smoking at the time of the tax hike reported that they seriously considered quitting after the increase. Roughly 40% (±4.1) of smokers changed where they purchased their cigarettes. When prompted to describe the type of change made, the overwhelming majority of these adults reported simply shopping around locally for cheaper cigarettes. After the tobacco tax, 28.1% (±3.8) of smokers reported buying fewer cigarettes. Fewer adults reported switching to a cheaper brand (14.2 ±2.9%).

Figure 7: Percentage of adults who changed their purchasing behavior after the tobacco tax increase – NJATS, 2002



When purchasing patterns are described by demographic subgroups such as gender or age, the sample size in these groups is much smaller (e.g, the subgroup of smokers aged 65 and older is a much smaller group than all smokers). Therefore, differences between groups must be large to be considered statistically significant. Nevertheless, it is valuable to identify trends among such population subgroups as they may be practically important and meaningful to tobacco control efforts.

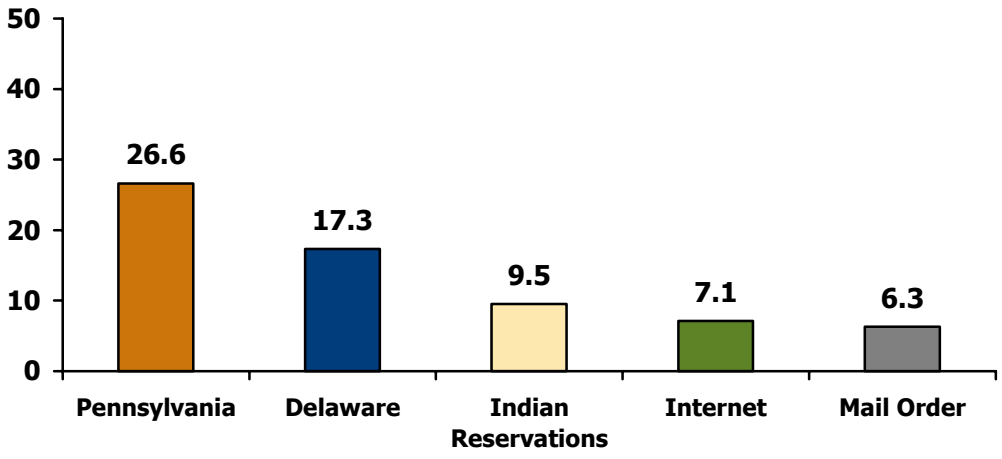
The percentage of black smokers (68.1 ±10.5%) who reported that they thought about quitting after the tax increase was significantly higher than other racial/ethnic groups (55.2 ±4.4%). Relative to other age groups, thoughts about quitting were more

common among smokers aged 18 to 24 (60.2 ±10.1) and those aged 65 and older (66.4 ±11.3%). Among adults who changed where they bought their cigarettes, there was little variation across gender, race, or age. However, current smokers (41.8 ±4.3%) were more likely than adults who reported quitting within the six months preceding the survey (27.2 ±14.5%) to report changing purchase locations, but this difference was not statistically significant. Whites (24.1 ±4.7%) were significantly less likely than minorities (37.0 ±7.1%) than to report buying fewer cigarettes in response to the tax increase. The percentage of smokers aged 18 to 24 (39.4 ±10.8%) who reported buying fewer cigarettes was significantly higher relative to smokers aged 25 and older (26.5 ±4.1%). While overall a small percentage (14.2 ±2.9%) of smoking adults reported switching to a cheaper brand after the state's tax hike, the proportion of adults aged 65 and older (28.4 ±14.8%) who switched to a cheaper brand was much higher than among adults under the age of 65 (12.6 ±2.6%). However, the disparity by age group was not statistically significant.

Buying tobacco from non- or lower-taxed sources

To look more closely at changes in purchase location, adults who reported smoking at the time of the tobacco tax increase were asked if they had ever bought cigarettes out of state, on Indian reservations, via the Internet or by mail order after the increase. As shown Figure 8, one quarter of adult smokers and recent quitters in New Jersey reported having ever purchased cigarettes in Pennsylvania ($1 tax per pack). Fewer (17.3 ±3.5%) reported ever buying cigarettes in Delaware where, at the time of the survey, the tax was $0.24 per pack. Nearly one out of 10 smokers reported ever buying cigarettes on Indian reservations after the increase (9.5%, ±2.7%). After the tax increase, 7.1% (±2.1) and 6.3% (±1.9) reported having bought cigarettes via Internet or mail order, respectively. It must be noted that that these findings may reflect a behavior that may only have occurred once and therefore, these findings should not be generalized to suggest a recurring practice.

Figure 8: Percentage of adults who purchased cigarettes outs of state, by mail, Internet or on Indian reservations – NJATS, 2002

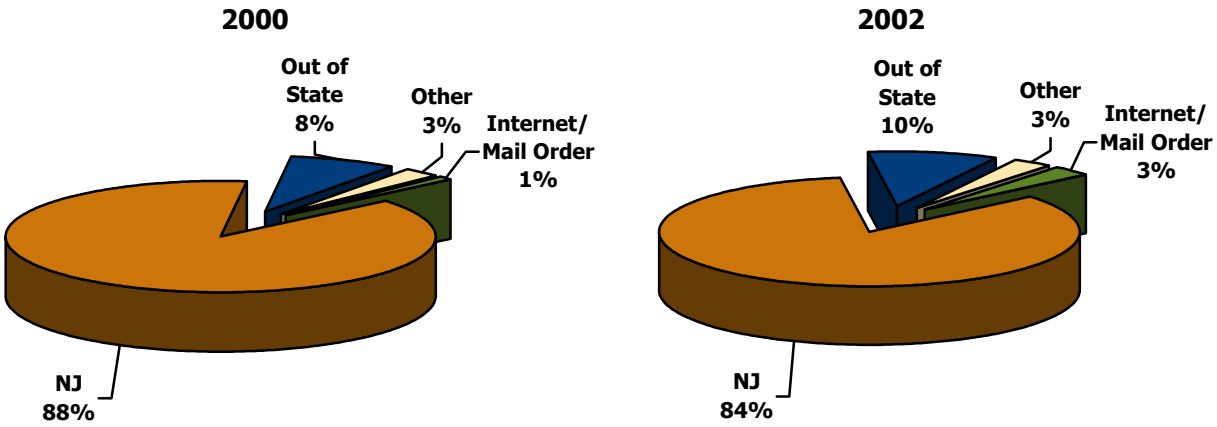


Usual source of cigarettes

The NJATS asked current smokers where they usually buy their cigarettes now. In 2002, the majority of smokers (84.2 ±3.0%) reported that they usually purchased their cigarettes in New Jersey. However, a sizeable percentage of current smokers usually purchased cigarettes from non- or lower-taxed sources. One out of 10 (10.3 ±2.4%) reported purchasing out-of-state and 3.1% (±1.7) reported purchasing via the Internet or mail order on a regular basis.

Compared to 2000, we saw subtle but important shifts in purchasing patterns among current smokers (see Figure 9). Overall, the percentage of current smokers who usually purchased their cigarettes in-state fell from 88.1% (±2.4) in 2000 to 84.2% (±3.0) in 2002, a 4.7% decrease. Out-of-state sales increased by 25% and sales by Internet or mail order grew from 0.8% (±0.6) in 2000 to 3.1% in (±1.7) 2002, an increase of over 200%. There was a significant increase in the total percentage of adults who reported purchasing cigarettes from non- or lower-taxed sources, 9.5% (+2.2) in 2000 to 13.3% (±2.8); these sources include outside of NJ, via Internet, or by mail order.

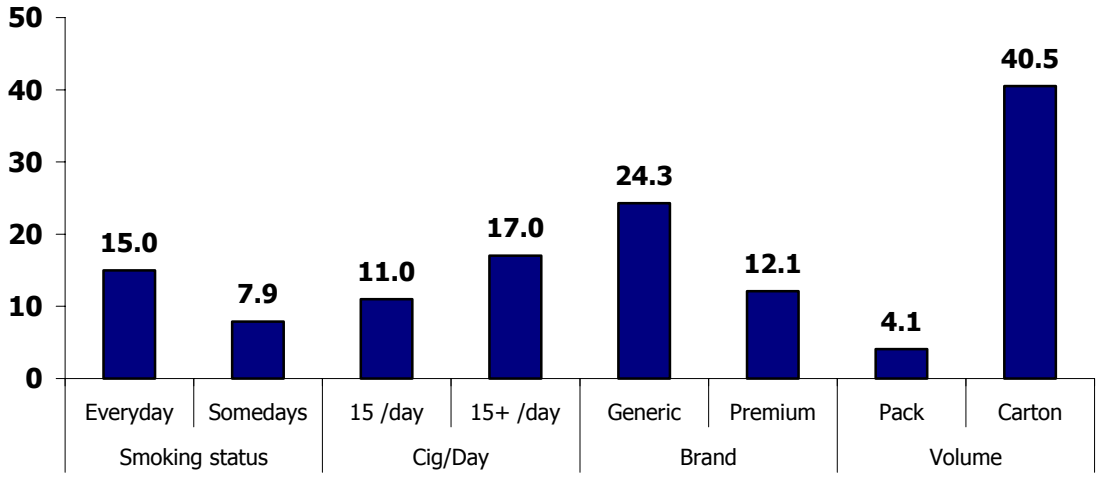
Figure 9: Where current smokers usually buy their cigarettes - NJATS, 2000 & 2002



Given the growth in non- or lower taxed tobacco purchases (i.e., out of state, Internet, or mail order) since the tax hike, we explored the characteristics of smokers who reported regularly purchasing cigarettes from these sources. As shown in Figure 10, everyday smokers (15 ±3.4%) were more likely than occasional smokers (7.8 ±4.4%) to buy their cigarettes outside of New Jersey, although the difference was not statistically significant. Similarly, heavier smokers or adults who smoke more than 15 cigarettes a day (17.6 ±4.7) were significantly more likely than lighter smokers to purchase out-of-state (9.6 ±3.2%). Current smokers who smoked generic brands (e.g., Doral, GPC) were twice as likely as premium brand smokers (e.g., Marlboro, Newport) to purchase their cigarettes outside of New Jersey. Lastly, smokers who usually

purchased cigarettes by the carton were 10 times more likely to report buying their cigarettes out of state than smokers who bought by the pack.

Figure 10: Characteristics of smokers who usually buy cigarettes from non- or lower taxed sources – NJATS, 2002



Loss of tobacco tax revenue

Purchasing cigarettes from non- or lower taxed sources, such as other states, by Internet, or mail order, impedes the State's efforts to collect appropriate tobacco taxes from its own residents. Using data from the 2002 NJATS, we provide an estimate of the State's lost tax revenues for everyday smokers. The estimate was calculated by multiplying the average number of cigarettes smoked every day (20.1 cigarettes per day) by the number of daily smokers who reported that they usually purchased their cigarettes in another state, by Internet, or mail order.

Therefore, we estimated that everyday smokers purchased 23,588,028 packs of cigarettes outside of New Jersey during the last six months of 2002 ($1.50 tax effective July 1, 2002), a loss of **$35,382,042** in tax revenue for New Jersey. The estimated loss in tax revenue over six months is conservative since the purchasing patterns of someday smokers, who also reported purchasing out of state, were not included. Additionally, smokers may underreport smoking status and daily consumption on self-reported surveys.[2] A tobacco specific survey may even cause some smokers to deny their smoking behavior, thus underestimating the total number of smokers.[3]

2 Hatziandreu EJ, Pierce JP, Fiore MC, Grise V, Novotny TE, Davis RM. The reliability of self-reported cigarette consumption in the United States. Am J Public Health 1989;79:1020-1023.
3 Cowling DW, Johnson TP, Holbrook BC, Warnecke RB, Tang H. Improving the self reporting of tobacco use: results of a factorial experiment. Tob Control. 2003;12:178-183.

ETS in the Home

Smoking policies in the home

Household smoking restrictions are an important step toward limiting a person's exposure to ETS. In 2002, more than two-thirds (69.3 ±2.3%) of adults reported smoking was not allowed anywhere in their home. Having a smoke-free policy in the home (i.e., smoking not allowed anywhere inside) was associated with children in the household, as well as the age of the children in the household (see Figure 11). Households with babies, toddlers, and preschoolers had the highest rate of smoke-free households (84.7 ±4.7%); the rate decreased as the age of the child increased. Households reporting no children had the lowest rate of smoke free homes (64.9 ±3.4%)

Figure 11: Smoke-free homes, by age of children in household –NJATS, 2002

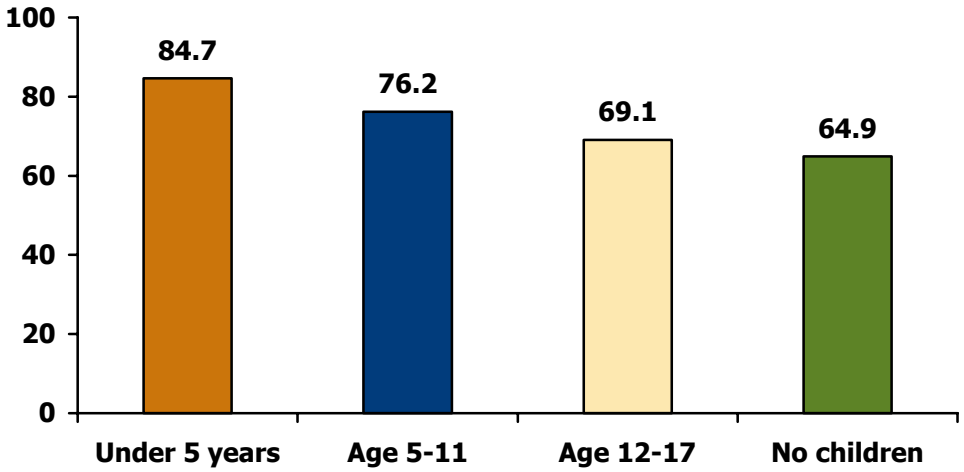
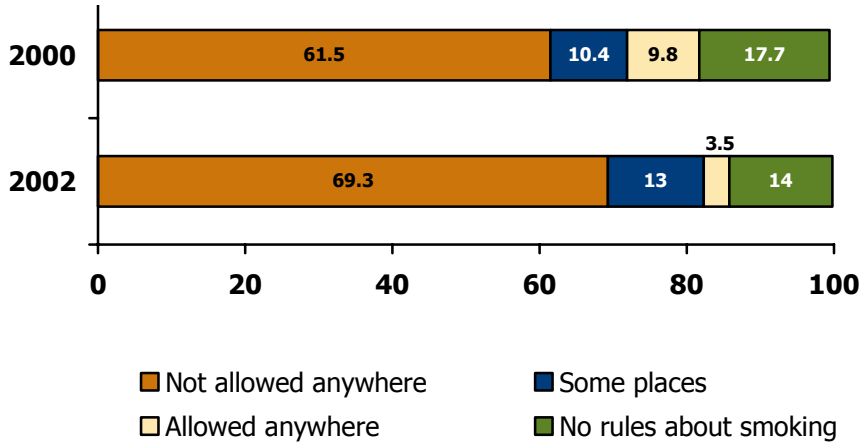


Figure 12 depicts the shifts in home smoking policies from 2000. The percentage of adults reporting smoke-free homes increased significantly from 61.5% (±2.2) in 2000 to 69.3% (±2.3) in 2002, an increase of 12.4%. Also, there were other encouraging changes regarding smoking policies for the home. First, the percentage of adults who reported that smoking was allowed anywhere in the home decreased substantially from 9.8% (±1.3) in 2000 to 3.5% (±0.9) in 2002, a 64.3% decrease. Second, the proportion of adults with no rules about smoking also decreased from 17.7% (±1.7) in 2000 to 14.0% (±1.7) in 2002.

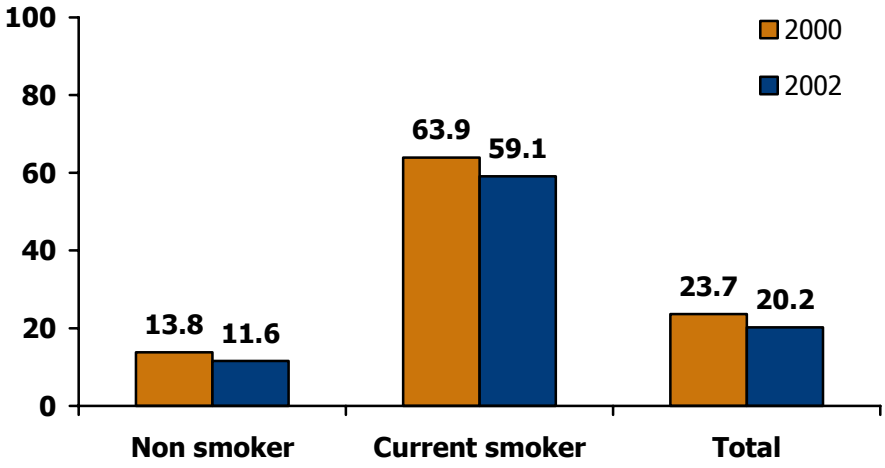
Figure 12: Shifts in home smoking policies, NJATS, 2000-2002



Exposure to ETS in the Home

A better estimate of ETS exposure in the home is obtained by asking adults directly about the presence of smoking in their homes. In 2002, approximately one out of four adults (20.2 ±1.8%) reported someone, including him or herself, smoked inside their homes during the 30 days preceding the survey. This represents a small, but significant decrease from 2000 where 23.7% (±1.8) of adults reported 30-day exposure to ETS in their household. One might suspect that the decrease is largely influenced by the changing prevalence rates (i.e., more non-smokers in 2002 than in the previous years). However, current smokers also reported a decrease in ETS exposures at home, from 63.9% (±3.4) in 2000 to 59.1% (±4.3) in 2002 (see Figure 13).

Figure 13: Percentage of adults exposed to ETS in the home – NJATS, 2000-2002



Discussion

The findings from the NJATS provide important new information about adult tobacco use. The NJATS observed small but meaningful changes in tobacco use behavior over the past three years. That similar results emerged consistently across a variety of measures is encouraging.

The declines observed in past three years must be sustained to realize long-term reductions in smoking prevalence and consumption.

Although subtle, the NJATS did detect changes in smoking behavior. Fewer adults are smoking. Current smokers are smoking fewer cigarettes and smoking less frequently. While three years is not a sufficient time frame in which to measure success, even these modest changes signify positive public health gains for New Jersey. The CTCP must sustain an environment that facilitates smokers' decisions to cut down or quit smoking. It is well known that a comprehensive approach to tobacco control will have the greatest impact on smoking across all populations. Programs that focus on only one component of the approach will fail or achieve only minimal shifts in smoking prevalence and consumption. The greatest impact on smoking prevalence will be the result of a wide range of coordinated tobacco control efforts such as promoting clean indoor air, encouraging use of cessation services, counter-marketing, increasing compliance with tobacco age of sale laws, etc.

The July 2003 tobacco tax increase to $2.05 per pack provides motivation to smokers to quit or reduce consumption; thus the CTCP must maximize this opportunity by providing resources to smokers who want to quit.

Cessation programs and services must be preserved to handle the increased demand from smokers. It is clear from the results of the NJATS that smokers and recent quitters modified their behavior and cigarette purchasing patterns in response to the 2002 tobacco tax increase. Over half thought about quitting and more than quarter bought fewer cigarettes. Although smoking rates will decrease again as a result of the second tobacco tax increase in two years, it is counterproductive to merely institute a tax without also providing cessation services. Expanded access and awareness of Quit services will increase the effectiveness of a tobacco tax increase and these combined efforts are more likely to achieve long-term reductions in smoking prevalence.

Changes in household smoking policies may indicate important shifts in the social norms around tobacco. However, individual efforts must be supported by organizational and community level efforts to change social norms.

More adults have smoke-free homes and there was a trend toward greater use of other restrictions on smoking in the home. An increase in smoke-free homes is likely to contribute to the reduction in cigarette smoking through shifting social norms and

increasing motivation for quitting. However, these changes cannot be sustained without implementing the previous recommendations made above. Cessation services must be in place as social norms shift and more smokers seek help with quitting. Additionally, tobacco control efforts at the community and organizational levels such as public education campaigns about ETS, mobilizing public support for smoke-free workplaces, and changes in public policy will sustain shifts in social norms around tobacco.

Appendix

Table 1. Percentage of adults who are current cigarette smoker by gender, race/ethnicity and age group-- -- New Jersey Adult Tobacco Survey, 2000-2002*

	2000	2001	2002
	% (95%CI)	% (95%CI)	% (95%CI)
Gender			
Male	21.9 ± 2.4	25.8 ± 2.3	20.8 ± 2.7
Female	18.0 ± 1.7	18.8 ± 1.7	15.6 ± 1.7
Race/Ethnicity			
White	20.3 ± 1.7	23.6 ± 1.7	18.4 ± 1.9
Black	19.6 ± 4.4	20.7 ± 4.1	16.5 ± 3.7
Hispanic	17.3 ± 4.2	17.2 ± 3.8	20.0 ± 5.3
Age Group			
18-24	27.5 ± 3.5	27.2 ± 3.2	22.7 ± 4.4
24-44	25.5 ± 2.7	24.2 ± 2.4	20.3 ± 2.6
45-64	15.9 ± 2.4	22.3 ± 2.8	19.4 ± 3.0
65+	7.7 ± 2.0	13.5 ± 2.7	9.1 ± 2.5
Total	19.8 ± 1.5	22.1 ± 1.4	18.0 ± 1.5

Table 2. Percentage of New Jersey adults who were current users of any tobacco product*, cigars, smokeless tobacco, pipes, bidis, or kreteks by gender, race/ethnicity and age group— New Jersey Adult Tobacco Survey, 2002

	Cigar	SLT	Bidi	Pipe	Kretek
	% (95%CI)	% (95%CI)	% (95%CI)	% (95%CI)	% (95%CI)
Gender					
Male	10.3 ± 2.3	0.6 ± 0.5	0.4 ± 0.3	1.6 ± 1.0	0.5 ± 0.3
Female	1.7 ± 0.7	0.0 ± 0.0	0.2 ± 0.2	0.0 ± 0.1	0.3 ± 0.2
Race/Ethnicity					
White	6.5 ± 1.6	0.4 ± 0.3	0.3 ± 0.2	0.8 ± 0.4	0.4 ± 0.2
Black	3.1 ± 2.1	0.1 ± 0.1	0.2 ± 0.3	0.5 ± 0.5	0.3 ± 0.3
Hispanic	4.6 ± 2.8	0.1 ± 0.2	0.2 ± 0.2	1.4 ± 2.6	0.5 ± 0.5
Age Group					
18-24	5.0 ± 1.7	0.6 ± 0.6	1.2 ± 0.9	0.3 ± 0.3	1.6 ± 0.9
24-44	8.5 ± 2.3	0.5 ± 0.5	0.3 ± 0.2	0.7 ± 0.6	0.5 ± 0.4
45-64	4.9 ± 2.0	0.1 ± 0.1	0.2 ± 0.2	0.8 ± 0.5	0.1 ± 0.1
65+	1.6 ± 1.5	0.0 ± 0.0	0.0 ± 0.0	1.1 ± 1.7	0.0 ± 0.0
Total	5.7 ± 1.2	0.3 ± 0.2	0.3 ± 0.2	0.8 ± 0.5	0.4 ± 0.2

Technical Notes

Instrument
New Jersey adults were surveyed via Computer Assisted Telephone Interview (CATI) using the 2002 NJATS instrument. The instrument was designed to meet specific needs of the CTCP. Survey items came from previous NJATS as well as the CDC's new core ATS survey. Efforts were made in 2002 to standardize the NAJTS to the CDC core ATS wherever possible. The NJATS addresses content areas such as tobacco use, usage of alternative tobacco products, smoking cessation, ETS at home and work, medical practitioners' advice, attitudes towards tobacco industry and smoking in general, health status and health coverage.

Sample
The NJATS is a representative survey of the New Jersey adult population. The sample for the 2002 New Jersey Tobacco Survey was a complex, multi-stage design with stratification and clustering within strata. The strata corresponded to five designated geographic areas delineated by county boundaries. In order to increase statistical power of analyses for smokers, recent quitters and young adults (18-24 year olds) were oversampled. For the same reason, telephone exchanges with large minority populations were targeted. Two response rates were calculated for the survey– the screening response rate and extended interview response rate. The screening response rate was the percentage of households that agreed to participate in the household screening process. For the 2002 NJATS, the screening response rate was 31.3%. The extended interview response rate was the percentage of complete interviews among all those selected to do an extended interview. The extended response rate for the 2002 NJATS was 50.4%. Overall, 4004 respondents completed the survey.

The data were weighted to adjust for non-response and the varying probabilities of selection, including those resulting from oversampling minorities, smokers, recent quitters, and young adults, providing results representative of New Jersey's adult population.

Analysis
SUDAAN statistical software, which corrects for the complex sample design, was used to generate 95% confidence intervals. Differences between estimates were considered statistically significant at the p = 0.05 level if the 95% confidence intervals did not overlap.[4] Hypothesis testing based on a t-statistic (see formula) was used to determine whether there were statistically significant changes between the specific years of the NJATS. If the absolute value of the computed t-statistic is greater than 1.96, then it may be concluded that the difference was statistically significant at the p=0.05 level.

t-statistic

$$t = \frac{\left(P_{1999} - P_{2001}\right)}{\sqrt{\left(SE_{1999}\right)^2 + \left(SE_{2001}\right)^2}}$$

4 Shah BV, Barnwell BG, Bieler GS. SUDAAN: software for the statistical analysis of correlated data, release 7.5, 1997 [user's manual]. Research Triangle Park, NC: Research Triangle Institute; 1997.

Glossary

Bidis: Small, brown, hand-rolled tobacco products primarily made in India and other Southeast Asian countries. Often flavored.

BRFSS: Behavioral Risk Factor Surveillance System is an ongoing nationwide surveillance system supported by the CDC and conducted in all 50 states.

CTCP: Comprehensive Tobacco Control Program, launched in New Jersey in 2000, was created using Master Settlement Agreement (MSA) funds to help stop young people from smoking and help current smokers quit.

CATI: Computer-Assisted Telephone Interviewing is a system in which a telephone interviewer conducts an interview, using a computer and a computerized questionnaire. The questionnaire appears on the computer screen and the interviewer inputs data from respondents directly into a computer file. The computer continuously monitors the sample and interviewing process and automatically dials pre-loaded telephone numbers for the interviewers.

Current Cigarette Use: Defined as having smoked 100 cigarettes in a lifetime and now smoking cigarettes on some or all days.

DHSS: Department of Health and Senior Services, State of New Jersey.

ETS: Environmental tobacco smoke is a mixture of the smoke given off by the burning end of a cigarette, pipe, or cigar and the smoke exhaled from the lungs of smokers.

Ever Use: Defined as the use of a tobacco product at any time over the course of one's lifetime.

Lifetime Use: Defined as having smoked 100 cigarettes in a lifetime.

MSA: The Master Settlement Agreement was a landmark legal settlement between 46 states and the tobacco industry intended to compensate the states for health costs attributed to tobacco use.

NJATS: The New Jersey Adult Tobacco Survey is a population-based survey designed to examine the tobacco behavior, knowledge, and attitudes of New Jersey adults. The survey was conducted in 2000, 2001 and 2002.

Quit Attempt: Defined as any quit attempt lasting one day or longer (i.e., successes and failures) in the past 12 months as reported by previous year smokers (i.e., current smokers and recent quitters).

UMDNJ: The University of Medicine & Dentistry of New Jersey is the state's university of the health sciences and includes eight schools.

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Prepared for:

New Jersey Department
of Health and Senior Services